



**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF SAFE DRINKING WATER  
TECHNICAL REVIEW FORM**

**PACKED COLUMN AERATION  
(N.J.A.C. 7:10-11.15(g))**

Water Purveyor

PWSID#

Municipality

Construction Material:

☐ Aluminum  
☐ Stainless Steel

☐ Fiberglass  
☐ Other:

Column Diameter: \_\_\_\_\_  
Column Height: \_\_\_\_\_  
Packing Height: \_\_\_\_\_

Water Flow Rate:  
Liquid Loading Rate:  
Air Flow Rate:  
Air to Water Ratio:

Packing Type:

☐ Tripacks  
☐ Tellerettes  
☐ Other:

☐ Rachig Rings  
☐ Pall Rings

☐ Saddles  
☐ Structured Packing

Packing Size:

Sources to Be Served:

Actual or Anticipated Conditions:

Well No.

Capacity  
(gpm)

Contaminant

Level Found  
(ppb)

Design Level  
(ppb)

\_\_\_\_\_  
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YES NO N/A

1. Is the column designed to remove contaminants from twice the maximum level found to below the MCL?

☐ ☐ ☐

2. Is the removal efficiency at least 95%?

☐ ☐ ☐

	YES	NO	N/A
3. Are means provided to prevent hydraulic flooding of the column?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the column designed to prevent scaling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is vapor phase treatment provided, if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is a suitable packing support tray provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are wall wipers or redistributors provided at a minimum of 10 foot intervals to prevent short-circuiting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are means provided to drain the column riser pipe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are pre and post column water sampling taps provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are means provided to allow for the periodic addition of chlorine for pre-disinfection or of another oxidant or acid for cleaning the medium?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the air intake located so as to avoid recirculation of the gas phase discharge from the top of the column?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are a protective screen of a minimum 24 mesh and air particulate filters on the air intakes provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Is a moisture barrier (demister) provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Where multiple sources are being treated, is a back-up blower provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*\*\*Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers. \*\*\*

I hereby certify that answers provided herein are accurate and reflective of the project being considered for approval.

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Signature of Engineer  
Professional Engineer's Embossed Seal

Date

N.J.P.E. #

Type or Print Name of Engineering Firm

pa15g(01/99)